(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number
WO 2005/038316 A1

(51) International Patent Classification[7]: F16K 3/26 // F24D 19/00

(21) International Application Number: PCT/DK2004/000714

(22) International Filing Date: 18 October 2004 (18.10.2004)

(25) Filing Language: Danish

(26) Publication Language: English

(30) Priority Data:
PA 2003 01525 16 October 2003 (16.10.2003) DK

(71) Applicant *(for all designated States except US)*: **FLOW-CON INTERNATIONAL A/S** [DK/DK]; Kongstedsvej 2, DK-4200 Slagelse (DK).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **MOESBY, Peter** [DK/DK]; Mandøvej 6, DK-4200 Slagelse (DK).

(74) Agent: **ZACCO DENMARK A/S**; Hans Bekkevolds Allé 7, DK-2900 Hellerup (DK).

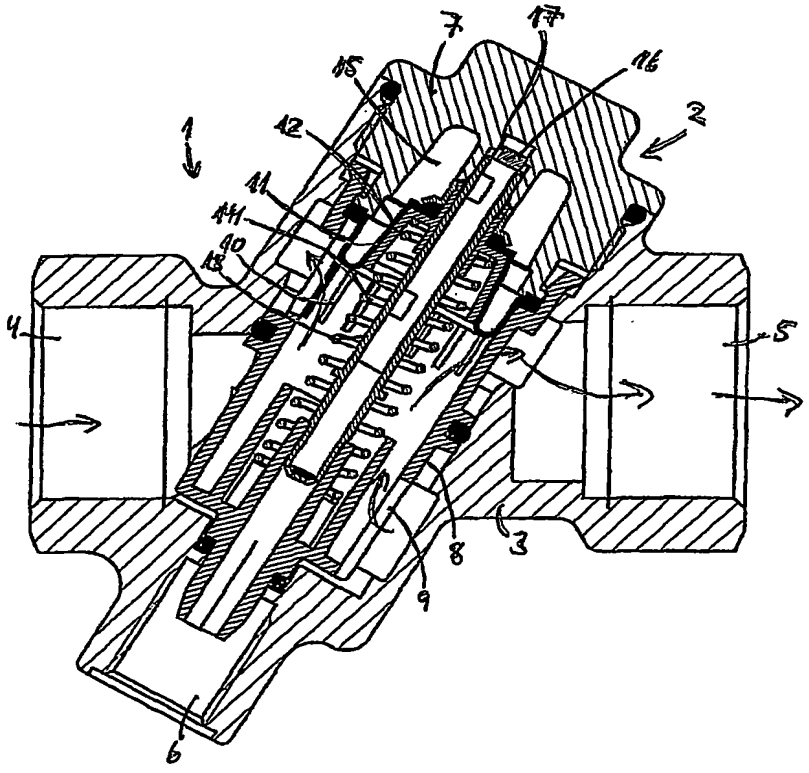
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: A REGULATOR INSERT WITH HYDRAULIC DAMPING IN OUTLET



(57) Abstract: A regulator insert (2) for valves, in particular for controlling liquid flow in a plant for central heating or air-conditioning. The insert (2) comprises inflow openings (9) and a plurality of slot-shaped outflow openings (10) extending in the axial direction of the insert and being, via a roller membrane (11), closable in response to the difference in pressure across the insert (2) under the influence of a spring (14) that seeks to keep the outflow openings (10) open. The slot shaped outflow openings (10) have at least two different lengths, whereby complete closure of at least some of the outflow openings (10) can take place only consecutively. At least one of the slot-shaped outflow openings (10) has such length that complete closure thereof by means of the roller membrane (11) is not possible.

WO 2005/038316 A1

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.